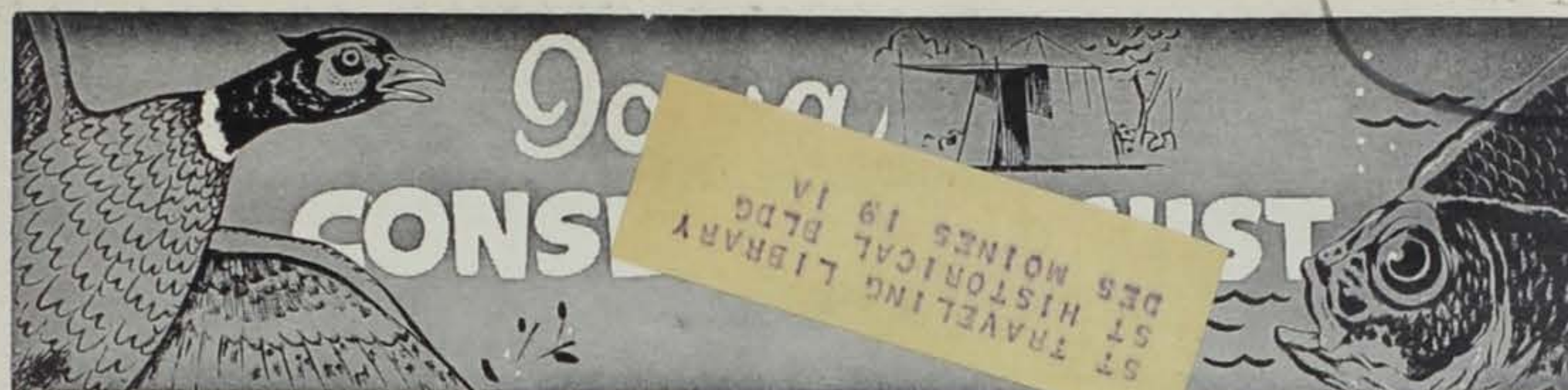


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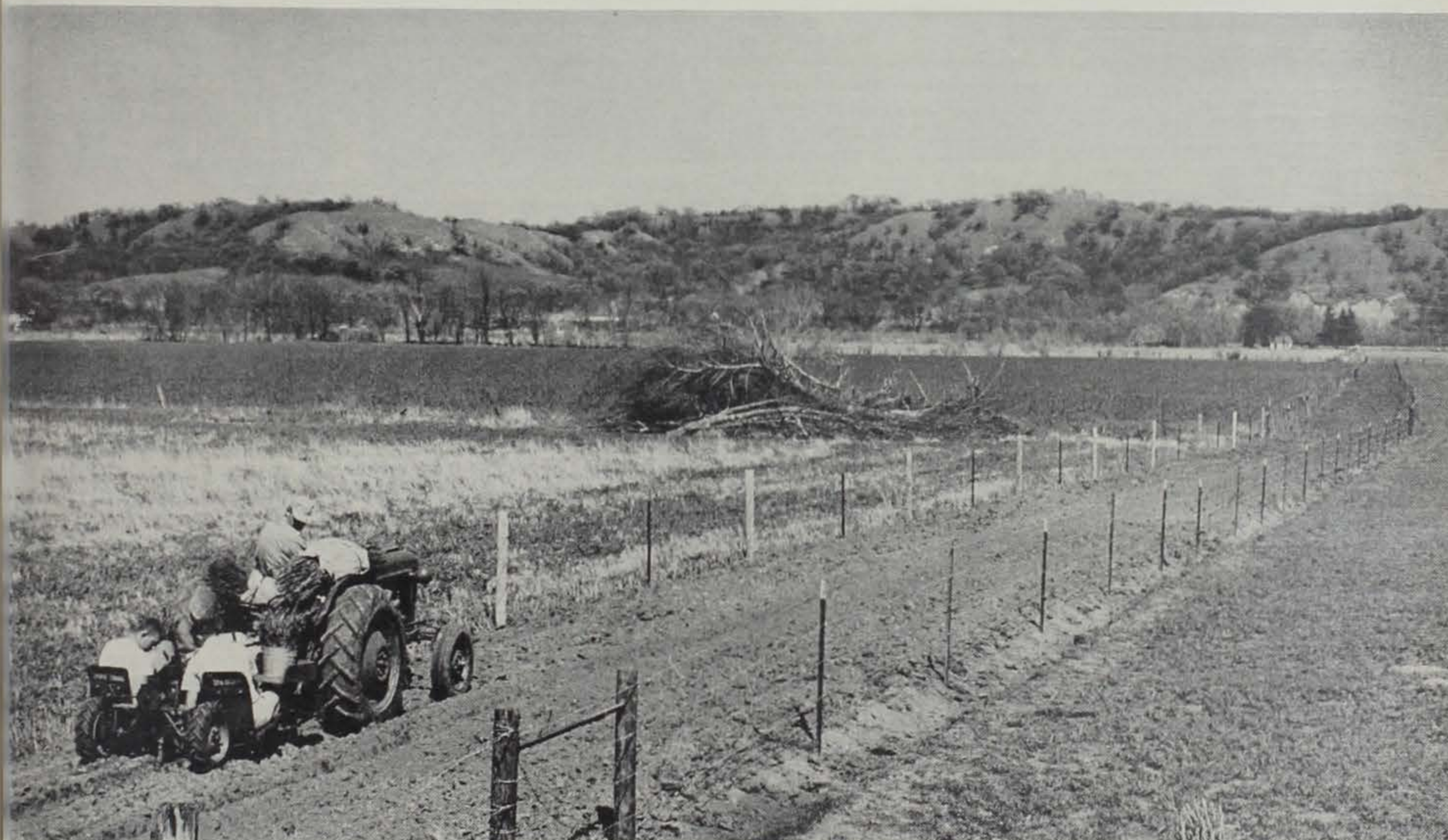


ume 23

June, 1964

No. 6

HELTER BELTS FOR WESTERN IOWA



Commission personnel planting the 1½ mile shelterbelt.

Jack Kirstein Photo.

Jack Kirstein

The Conservation Commission Game Section has just completed a 1½ mile long triple planting shelter belt on the Folsom Farms, thirteen miles south of Council Bluffs.

The shelter belt will accomplish two ends. For the farm it will provide wind erosion and moisture controls, while for the sportsmen it will provide a mile and a half long shelter for pheasants and other game.

The shelter belt itself is a three row planting. In the center, a row of hybrid poplars will give the height necessary to break the wind which can blow so strongly across the flat plains of the Missouri River bottoms.

On either side of the center row will grow one row of ninebark, and one row of bush honeysuckle. These plantings will grow close to the ground to provide winter cover and escape from predators for the small game and pheasants that will benefit directly from the shelter belt.

The Game Section has a 10-year agreement on the use of the land for the shelter belt, and all expenses of plowing, planting, and fencing will be borne by the Conservation Commission. The trees and bushes are provided from nursery stock at the Commission's Ames forest nursery.

The shelter belt is a strip one rod wide and runs from east to west. The east end will stop within easy viewing distance of the route of the Interstate Highway 29 when it is completed.

In all, nearly 10,000 plants will be set to make up the finished shelter belt. Approximately 4,000 bush honeysuckle, and 4,000 of the ninebark will be used. The balance is made up of more than 1,600 of the hybrid poplars.

Many Iowa farms could have benefited from such a planting during this spring when the high winds caused so much drifting soil erosion over much of the state. Areas such as the flat alluvial river bottoms of the Missouri river and the flat prairie areas of northern and northwestern Iowa could use the aid of such shelter belts.

Other plants such as the purple willow and conifers could have been used and can be used in other areas. However, the evergreens would be slower in providing the necessary height, since their growth rate is slower than the poplars.

Not only will the shelter belt stop the wind erosion of valuable farmland, but it will break the force of winter winds. This will allow the winter snow to accumulate on the fields instead of being blown off. As a result, when the early spring sun appears, the snow will melt and provide additional moisture for the spring plantings.

A real boon to the sportsman, and the best answer to raising more Iowa game under natural conditions, anyone interested in arranging for such a planting on their farms should contact their local Conservation Officer, a local Game Management Unit, or write to the Des Moines office of the Conservation Commission for details.

Iowa Conservationist

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Commission Minutes

Mason City, May 11-12

LANDS AND WATERS

Approval was given for a construction permit to Cory for an underground waterline on Lake Okoboji.

Approval was given for a construction permit to Keenan for a silt retention structure at Rock Creek Lake.

A permit was issued for an underground telephone cable at Lewis and Clark State Park.

The town of Lehigh was granted permission to construct a sewage pipeline across Des Moines River.

Permission was given to O'Toole for an entrance off a state park road at Black Hawk Lake.

A request to install dusk to dawn lights at Lake Keomah was refused and an order was issued for the removal of lights which are presently installed there.

A request for hard surfacing of an access road in Rock Creek Park was refused and legality of an existing access road was tabled for further study.

Further study was ordered on a request to operate a boat concession by Ahrens on Lake Okoboji and a request for the installation of a diving raft by Jensen on West Okoboji Lake.

Approval was given for an option on about 62 acres at \$65.00 each, adjacent to White Pine Hollow.

Approval was also given to an option on about 15 acres adjacent to the Shimek Forest area near Donnelson at \$375 total cost.

The Superintendent of Engineering was authorized to take bids on a sewer line and lagoon at Rock Creek Lake in Jasper County; a service building on Wilson Island in Pottawattamie County; a service building in Wapsipinicon State Park; trails, foot bridges, and the repair of a cave in Bixby State Park; extension of a camping area road in Beeds Lake State Park.

Approval was given for appointment of eleven water safety officers for this summer.

Approval was given for the use of ice vending machines by concessionaires in state parks.

The Commission held a public

hearing on a ski area proposal for Pilot Knob State Park and toured the area under discussion.

COUNTY CONSERVATION ACTIVITIES

Land acquisition was approved for the following counties.

Davis County received approval for the acquisition of 2.5 acres of land through a twenty year lease for the development of a park and a highway safety rest area on Highway No. 2.

Howard County received approval for the acquisition of two acres of land as a gift called the Carroll Access Area located on Crane Creek for use as a fish access area, picnicking and camping.

Howard County received approval for the acquisition of Davis Corners Highway Safety Rest Area consisting of one acre of land under a sponsoring agreement with the Iowa State Highway Commission, located 9 miles west of the town of Cresco.

Howard County received approval for the acquisition of the Louvar Area, consisting of 0.80 acre tract of land as a gift for the development of fishing area and limited picnicking on Crane Creek.

Jasper County received approval for acquisition of Reasonor Skunk River Access Area consisting of 1.50 acres of land at no cost from the Jasper County Board of Supervisors for use as a river access area and limited picnic facilities.

Monona County received approval for the acquisition of Interstate Highway 29 Wildlife Habitat Area consisting of 150 acres of land in two tracts from the State Highway Commission under a 10 year lease at the cost of \$1.00 per acre per year for use as wildlife habitat providing nesting and winter cover for upland game birds.

Polk County received approval for the acquisition of the Chichaqua Wildlife Habitat Area addition consisting of 137 acres of land at a total cost of \$37,587 as part of this wildlife habitat area.

Washington County received approval for the acquisition of the Leichty Timber Area consisting of 80 acres of land at a total cost of \$5,000 as use as a timber preserve with some camping, picnicking, hiking and horseback riding trails.

Washington County received approval for the acquisition of Marr Park Area consisting of 40 acres of land, at no cost, from the County Board of Supervisors. This area was formerly operated as a park by the Board of Supervisors and will now be further developed and operated by the County Conservation Board.

Cherokee County received approval for a development plan for the Kearny Knob-Little Sioux Recreational Area primarily for use as a fishing access area, picnicking and camping.

Cherokee County received approval for Ritts-Little Sioux Access Area for use as a fishing access area and limited picnicking.

Access Area for use as a fishing access and limited picnicking.

Davis County received approval for a development plan for the West Grove County Park consisting of 2½ acres to be used primarily for picnicking, and group play field.

Delaware County received approval for a development plan for a central Headquarters and Material Storage Area located on edge of Manchester.

Dubuque County received approval for revision of the Massey Marina development plan, relocating sanitary facilities.

Franklin County received approval for development plan for Popejoy County Park, which would provide picnicking, camping, a reforestation project and construction of a low head dam on the Iowa River, with appropriate permission from the Natural Resources Council.

Jasper County received approval for a development plan for the Reasnor Skunk River Access primarily for use as a fishing access area.

Marshall County received approval for a development plan for the Mag Holland River Access Area consisting of 80 acres of lowland to be used primarily for fishing access, some primitive camping and as a game habitat area.

Polk County received approval for a preliminary development plan for the Chichaqua Wildlife Area with a more complete detailed planning proposal to be submitted later.

Tama County received approval for a development plan for the Manatt's Iowa River Access Area to be used as fishing access and boat launching.

Washington County received approval for a development plan for Marr Park which provides for picnicking, playgrounds and other general park uses.

Winnebago County Conservation Board was asked for more detailed plans on the Ambrosion Fishing Access Area on the Winnebago River.

The Conservation Commission approved the transfer of State land by an agreement of conveyance of two parcels of land consisting of 12.97 acres of land known as the Silver Lake State Park in the town of Delhi to the Delaware County Conservation Board and for the transfer of 29.57 acres of land known as Lost Island State Park to the County Conservation Board of Palo Alto County.

Monona County received approval for a management agreement for Decatur Bend Access Area and the Onawa Materials Storage Yard Area both under a renewable 25 year management agreement between the Iowa Conservation Commission and Monona County Board of Supervisors for the care and maintenance of these areas. Ownership will be retained by the State of Iowa.

FISH AND GAME

Approval was given for an option at \$63 an acre for 114 acres located adjacent to the V. River in Fayette County called Big Rock area.

A construction contract awarded to the F.A.S. Construction Company of Tingley, Iowa, a dam for Meadow Lake in Adams County at a total cost of \$65,000.

County Engineer for Chickasaw County received a permit for construction in the Chickasaw area.

Approval was given for a plan for land acquisition which would increase the Goose Lake area in Clinton County from about 1,000 acres to about 1,100 acres.

The Superintendent of Engineering was authorized to advertise bids for the resurfacing of roads in the game farm research and exhibit area.

Approval was given to a construction permit for a road on south side of Moose Lake which would allow for a higher road and require that marsh water be maintained as is.

A request for a scuba diving tournament in West Okoboji, June was refused.

GENERAL

Approval was given to phases 2 and 3 of the United States Army Engineer development program for the Skunk River located in Green Bay bottoms adjacent to Mississippi River.

The Commission authorized Director to delete the words "use in their steam generation plant" from the agreement at the 150 million gallons of water per year used by the power company from Greene Valley Lake.

Travel was approved to the Forest Service Region Nine meeting at Salem, Missouri; North Central States Boating Administrator's meeting at Marquette, Michigan; the Midwest Fish Game Officers Association meeting in Winnipeg, Canada; the American Association for Conservation Information meeting at Austin, Texas; a Mississippi Flyway Council tour of the duck nesting area near Regina, Saskatchewan; pollution hearing of a congressional committee at Kansas City, Missouri; the Midwestern State Flood Control Water Resources Conference at East Lansing, Michigan; and renewed travel authorization for various workers of commission to enter adjoining states in pursuance of their work.

An administrative order prohibiting use of pontoon boats on public lakes was rescinded.

The superintendent of game and fishery submitted a comprehensive report concerning the opportunity for Conservation Commission participation in watershed development work under public law 566 which would provide for game development and fishery.

(Continued on page 43)

Upper Iowa River Smallmouth Bass for a Change of Pace

The opening of the smallmouth bass season in Iowa usually creates a stir among anglers. The smallmouth is not a major game species—at least not from the German's standpoint. Iowa does, however, have some fine smallmouth waters that could stand to have increased fishing pressure. The smallmouth fisherman is mainly in the minority among anglers in Iowa. He has the reputation much to himself as he enjoys the fighting qualities of a fine fish.

In June, the early part of the smallmouth season, artificial baits are most productive. Natural or live baits are better in late summer and early fall. Of the artificials, wet flies, feather streamers, spinner and bucktail combinations are best.

The sunken lure is the best procedure early in the season and it should be fished well toward the bottom. The season opens at a time which usually follows closely on the spawning period, so that the fish may be pugnacious and strike a lure landing near them.

When fishing, stay as far from the spot being fished as possible. "Out techniques" apply—all movements slow and deliberate, no shadow on the water, no silhouette against the sky.

Fast current will keep most fish headed upstream, so fish upstream ahead of yourself if possible. Cau-

tiously approach a pool and watch quietly for a few moments. Cast to a rise if you see one. One of the best spots to fish is the head of the pool where the current enters. Cast to the fast water and let it carry your lure into and through the pool. Natural cover such as submerged rocks, logs, and stumps as well as undercut banks are also good.

The angler should fish all sections of the first few pools to locate the fish. Then in other pools hit those sections that were productive in the early pools. Use a

variety of lures and experiment.

Where to go? Probably the best Iowa smallmouth water will be found in the streams listed below. Remember, too, that many small tributaries to these streams will offer good smallmouth fishing.

Smallmouth water: Upper Iowa River, Yellow River, Turkey River and tributaries, Volga River, Maquoketa River, Wapsipinicon River (and Buffalo Creek), Little Cedar River, Cedar River, Shell Rock River, Iowa River from Alden to Eldora, and the Des Moines River particularly the West Fork.



Jim Sherman Photo.

The Upper Iowa River is one of Iowa's well-known smallmouth bass streams.

COMMISSION MINUTES—

(Continued from page 42)

management in cooperation with other governmental agencies.

The Commission gave tentative approval to cooperation in the development of the Three-Mile Creek watershed in Union County and they approved full sponsorship of the Badger Creek Watershed development in Dallas, Madison, and Warren Counties including 276 acres of water.

The Director was ordered to assign appropriate personnel to work on the cooperative watershed program.

The Director was authorized to adjust financing of the three divisions to complete the present fiscal year.

A policy to seek uniformity of signs used by the various sections of the Commissions was approved.

Did You Know?

The hummingbird feeds constantly but has no crop for storage of plant nectars on which it feeds. This leads to a condition known as thermal dormancy which prevents the bird from literally "burning up" at night when it is roosting.

Female toads and frogs are usually voiceless except for cries of alarm. But males summon their mates to the breeding pools by voice. They call with the mouth closed by using the inflated vocal sac as a resounding compartment.

The liver oil of the mackerel shark was used as an ingredient in tanning leather in the early 19th century.

Grebes are duck-like swimming water birds, poor fliers but expert divers. They can be distinguished from ducks by the pointed bill, narrow head and neck and tailless appearance.



"Hilbert's always coming home with something new and fascinating."

MATCH YOUR BOAT AND MOTOR

Jack Kirstein

Prospective boat buyers are often confused as to what motor to buy for their boat to provide the maximum performance while keeping an eye on the safety factor.

As a rule of the thumb, for the average canoe no motor over 3 to 4 horsepower should be used.

This also applies to small 10- to 12-foot boats with only 12 inch depth. The standard depth of a transom for any motor is a minimum of 15 inches.

When the horsepower increases, beam width becomes an important factor, because safety depends on both size of the boat and its design.

A 5HP motor should not be used on less than a 10- to 12-foot boat, with a 15 inch transom depth and not less than a 4 foot beam width.

A 10HP motor should not be used on less than a 12- to 14-foot boat with a 15 inch transom depth and not less than 4½- to 5-foot beam.

A 15HP motor requires a 12- to 14-foot boat with a 15 inch or better transom depth and not less than a 5-foot or better beam.

For motors in the 25HP and 30 to 35HP range the beam should be increased considerably, and the



Jim Sherman Photo.

The combination of a well-matched boat and motor can offer many safe, enjoyable hours of family recreation.

transom depth becomes another problem as the length of the motor increases.

In the 50HP and over categories, 75-inch and greater beams are needed, and again length should be increased as well as depth. A 50-HP motor will weigh approximately 250 pounds and another 20

pounds is added for the weight of the battery and gas tank, to make a total of 270 pounds or more. All of this weight will cause your small boat to ride low in the water at the stern, and as power is applied, can lead to serious accidents. Use only large boats in this horsepower class.

For water skiing, specially designed boats with planing bottoms and minimums of 66 inches in the beam are needed, to accommodate the 35 to 40HP motors and over. These boats are designed to skid or slide when a skier swings wide to the side of the boat, rather than to roll and perhaps cause an accident.

If in doubt, check with your local Conservation Officer or Water Safety Officer. Also contact more than one boat dealer and check the recommendations of each.

Many boats carry the OBC maximum horsepower rating marked on a metal plate on the transom. These ratings are actually derived by using the largest possible motor on the boat in a trial and error method. You can trust the ratings as marked.

Things You May Not Know

At least 1,500 species and subspecies of mammals have been identified in North America north of the Rio Grande.

Peccaries are found only in the Americas. Although numerous in Central and South America, they are comparatively scarce in the United States.

A struggle between bull elk may end in a broken neck or a fatal horn-thrust for one contestant or locked antlers for both.

Mushrooms that Glow in the Dark

Carol Buckmann

Deep in the woods on a moonless June night, all is still except for the occasional haunting cry of a night creature or the lilting strains of a whip-poor-will. The yellow eyes of a great horned owl search the forest floor, then the great bird swoops on muffled wings, the squeal of its terrified prey breaking upon the serenity, indicating a successful hunt.

Clouds cover the moon and the luminous light of fireflies dots the woods with their flashing dance, seemingly the only means of light. But at the night's blackest, a strange phenomena reveals itself as a ghostly, greenish-white glow around dead, decaying wood illuminating the blackness.

Looking closer, a night wood visitor may find the soft glow is a hobgoblin's hex but rather light from a jack-o-lantern mushroom, one of the three common luminous mushrooms found in Iowa's woodlands.

This production of light without heat, similar to that produced by fireflies, has been the object of speculation and inquiry since the times of Aristotle and Pliny. The light of these and certain other luminous mushrooms and their relatives is often called "fox fire" by natives, woodsmen, foresters and anyone who has tramped the woods at night.

Far northern woodsmen have used this glowing quality to good use using bits of decaying wood invaded by these luminous fungi to mark their trails, the soft phosphorescence guiding their way. This glowing quality is displayed in young, fresh mushrooms from June to October and is best seen on moonless nights.

The three most common mushrooms of this type found in Iowa are jack-o-lantern (*Clitocybe nidulans*), the honey agaric (*Armillaria mellea*) and the small astringent Panus (*P. stypiticus*). Any of these can be found around downy wood.

The honey agaric or "honey mushroom" develops the glowing quality in the interwoven, thread-like filaments that grow in strands into surrounding wood. The strands have also given it the common name "shoestring mushroom." In this case, it is the strands and not the wood that glow.

Honey mushrooms are parasites on trees and other woody plants where they grow in clusters mostly on hardwoods but also in conifers. Their presence attacks roots, both fruit and forest trees bring about a growth decline and kill the branches. They are said to be very good in omelets or fried butter.

On any downed wood or around decayed tree trunks, the ghostly light of jack-o-lanterns may

(Continued on page 46)

NORTHERNS, MUSKIES



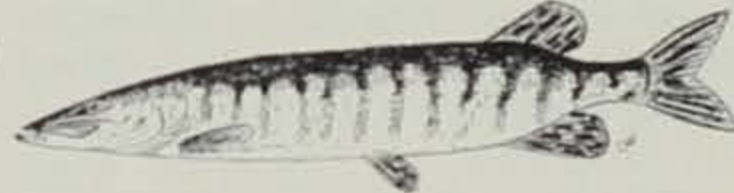
Carol Buckmann

Since the original stocking of muskies in Clear Lake and West Okoboji four years ago, there has been considerable confusion by anglers between muskies and northern pikes. The distinguishing features between the two are quite evident.

First of all, northern pikes are usually a bluish-green to gray on the back with irregular rows of light yellow or gold spots on the sides running lengthwise. Muskies are often olive to dark gray with dark overmarkings on the sides that may be vertical or horizontal bars, spots or splotches rendering a "tiger-like" appearance.

Another difference is found on the cheeks. Where the cheeks of northern pikes are fully scaled, the musky has no scales on the lower half of the cheek. The next place to look and the surest identification is the underside of the lower jaw. Northern pikes have five holes on each side of the jaw whereas muskies have six to eight.

The first attempt to raise muskies was made in 1960 when 1,500 were obtained from the Kenu Fish Hatchery at Land O'Lakes, Wisconsin, and released in a pond prepared at the Decorah Hatchery. The production that year was 85 muskies ranging in length from 7 to 12½ inches.



Forty were stocked that year in West Okoboji and forty in Clear Lake. Again in 1962, muskies were reared at the Decorah Hatchery and in July, sixty fish, ranging from four to five inches were removed and stocked equally between Clear Lake and West Okoboji. That fall, eleven more were stocked, averaging twelve inches long.

To date, 81 muskies have been stocked in West Okoboji and the same number in Clear Lake. There have been six records of muskies from the 1960 stocking in West Okoboji and by 1963, fish up to six pounds had been taken. The latest musky taken by angling was in August, 1963, when a six pound, 8 ounce, 29 inch fish was taken from Clear Lake.

Two large muskies were taken in April of this year by netting crews collecting brood fish for walleye hatchery. At Clear Lake a 31½ inch, eight and a half pound immature male was taken, and from East Okoboji a 10 pound, 32½ inch specimen was taken.

If by chance you should happen to catch a musky, return it to the water and let fisheries personnel know. You'll be violating the law by taking it home, as there is no open season on muskies.

Fundamentals of Fly Fishing—Part V

Fly Fishing—

Bill Tate

Asst. Supt. Fisheries

Largemouth Bass

The largemouth bass is now widely distributed in the United States, and is probably sought by more state-side anglers than any other species of game fish. He is found in a variety of habitat—from marshes on the coasts, to lakes and streams. The creation of large impoundments in the Dakotas and Sierras has created thousands of acres of good largemouth habitat. Old "sachem" does well in the warm, dark water of the South, as well as the clearer waters farther north. His nicknames, referring to his large mouth, are well deserved! He has a big mouth, and an appetite to match. Almost any creature that crawls, walks, swims or floats is taken for food whenever available.

Iowa, catchable populations of largemouth are found in most natural and artificial lakes, in river impoundments, and in thousands of farm ponds, gravel pits and quarries. Largemouth are easy to catch when abundant, but difficult to catch in heavily wooded waters. It has been shown that they have a memory of sorts, some fished-out waters provide standing catches of largemouth for the angler "who is different."

In a normal Iowa season, the largemouth spawns in May. This provides an opportunity to catch the bass not easily taken at other times of the year. After spawning, females go on a feeding spree while their mates are busy mind-the-nursery. The male largemouth makes a nest (a shallow, saucer-like depression) in relatively shallow water, and after the eggs are deposited, tends the eggs until they hatch. He also patrols the school of fry that are his offspring until they become large enough to be attractive as food. The survivors are then on their own. A fly retrieved through a nest will usually provoke a strike. A fly drawn through a school of small bass fry is also effective!

Underwater lures for bass are designed for action! Streamer flies, minnows, darters and other small fish should be retrieved rapidly in the erratic darting motion of a small fish trying to escape. When a bass follows a lure, the speed of the retrieve should be increased. It's impossible to retrieve a fly fast enough to get in away from a bass that follows it. Increasing the rate of retrieve may provoke a strike from an undecided largemouth.

Small fly rod size jigs or leaded flies should be retrieved with a

jerk and pause. These lures simulate insect nymphs, crayfish and other bottom dwellers that move in short dashes close to bottom when they are in a hurry. To be effective, these lures should "kick up" a miniature cloud of sand or silt from the bottom at the start of their short flight.

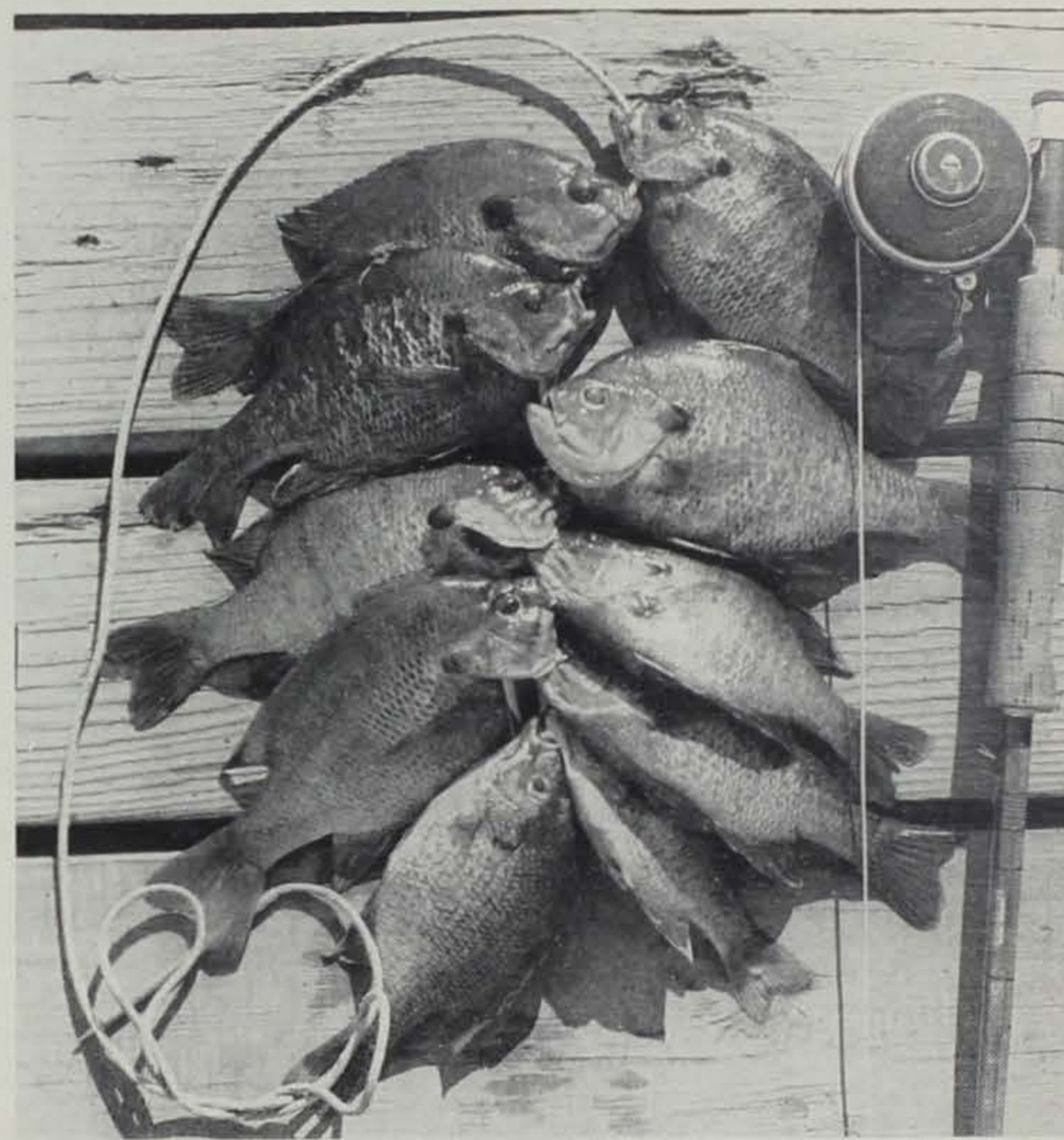
Spinners and small metal wobblers may irritate a largemouth as well as appeal to his hunger. Erratic or "off-beat" action imparted to these lures may entice strikes when a normal retrieve fails.

There are few fishing thrills that compare to the slashing strike of the largemouth taking a surface lure. Surface lures of cork, balsa, plastic or deer hair are "killers" if fished properly. Bass lie in weedy pockets, near stumps, logs, or other cover in wait for prospective prey. When a surface lure alights close to a waiting bass, he may strike immediately. If he doesn't, a "war of nerves" follows. The longer the angler can wait before moving the lure, the better the chance of catching the bass!

Fly rod surface lures are designed for a certain type of retrieve. The typical popper with a hollow head is designed to pop or "blurb" with a quick pull on the line as the rod tip is quickly brought back toward a vertical position from about a forty-five degree angle. The lure is retrieved with a series of these pops. A slow retrieve with long pauses between "pops" is usually most productive. A good variation, after this technique has failed to pay off in likely spots, is to make the cast and pause for several minutes. Then, start a fast retrieve, so that the lure bounces across the surface. This technique will sometimes provoke a vicious strike from an old lunker "linesides." Late evening (and at night) and early morning are usually the best times for surface lures.

The most effective surface lures are those that provide a commotion, a sound and action. Wings or legs that flap or kick when the lure pops add to its effectiveness. Surface lures made from deer hair are particularly effective. Cork or wood lures are often ejected quickly after the strike. It is necessary to set the hook quickly and hard after a surface lure is taken. Surface lures made of hollow body hair of deer float well, and apparently have a natural feel so that they are retained by the bass, which facilitates setting the hook.

"Old satchelmouth" is curious, pugnacious and usually hungry. He may persist in unsuspected numbers and lunker sizes in waters associated with a great amount of human activity. Unusual fishing methods may catch a few bass, but, night-time fishing will provide a



Jim Sherman Photo.

The scrappy bluegill is a favorite with the flyrod fisherman.

bonanza of bass of these areas. Beaches will provide excellent largemouth fishing minutes after they are deserted by swimmers. These educated bass that give the "brush off" to a lure in daylight will blast the same lure after dark. Bass have a memory . . . they associate human activity with danger. In clear water areas with intense human activity, they "go on the night shift." Night fly fishing is best with streamers—fished near the surface and surface lures. Fly fish at night! Sure, you can go before dark . . . select the areas to fish and get the gear ready; use a boat or wade. You might even catch a fish before dark.

An often repeated action of the trout fisherman is to rest a large fish that has followed, struck at a lure or has been spotted by the fisherman. This is certainly not true of "linesides." A quick cast to the spot where he first struck or "showed" will often result in a strike. Fish seen or even "spooked" by the fisherman can usually be provoked into striking by repeated casts over him. A surface lure is best for raising his ire.

We remember an occasion when two of us were standing on a bridge over a tidal creek in Maryland, six respectable to lunker size largemouth cruised in from the estuary, swam under the bridge and took a position in the creek about 50 feet from us. We could see the fish clearly, and they certainly could see us, at least detect

any action on our part. My companion was a trout fisherman, born and raised in Colorado, so he was soon "suckered" into a bet that at least one of the fish could be caught. After much insistence he kept casting. After forty-two casts a geyser of spray erupted as a largemouth torpedoed the lure with abandon. Some sixty casts later, he had accounted for four of the six bass, and we called it a day!

"Old linesides" has the finesse of a fighting bull, also his fighting heart. He has the courage and speed to test both your nerve and your tackle. Try him . . . try him soon!

The Bluegill

The bluegill is found as a companion to his larger cousin, the largemouth bass. He has similar habitat requirements, and in Iowa, they will be found in the same waters. The bluegill or "bream" as he is called in the South, has a very small mouth, and feeds predominantly on insects and other small invertebrates. Bluegill start their spawning activity after most largemouth have completed spawning and spawn at intervals throughout the summer. They use the same general spawning sites, and shallow bars are pock-marked with nests in good bluegill waters. The nest guarding males can be taken by retrieving small (Size 14 to 10) wet flies across their

(Continued on page 47)

TENT TOTIN' TRAILERS

Jack Kirstein

For the vacation camper who has been loading and unloading a tent and all the accessories packed in the family auto, the step up to a camping trailer may be a welcome one.

The actual choice of a trailer that will best suit you may not be an easy one, although there are many different trailers to choose.

Some of the luxuries available in tent trailers are found only by using them. The first dividend you will receive after becoming the proud owner of one of these chrome plated wicki-ups, is once more having the use of your car for yourself and the family. No more will you perch the kids on top of the sleeping bags or camp kitchen in the back seat. No more will your patient wife have to peek out from behind hanging clothes to see the scenery as you travel down the road. No more will you have to spend thirty minutes unloading the trunk to get at the spare tire in case of a blow-out. All these things are now neatly stored in the bouncing guest room fastened to your rear bumper.

If you choose, mother can now sleep off the ground on foam-padded beds, will have a miniature version of her kitchen sink at home, or enjoy a myriad of little conveniences she never had before in a campground.

For yourself, you can choose wisely and ease many of the little chores that detract from camping fun, such as: faster erection of the tent in case of impending rain, easier breaking of camp on those one-nighters along your way, space to take along a few tools and other essentials that you left at home before.

If it is possible to rent a trailer of the type you would like to buy, by all means do so. This will afford a chance to try it out and be certain that your choice is a wise one.

It is possible that your choice may have been partly on the strength of a good "sales pitch" made in behalf of a certain type of trailer. Trying it out will set the record straight for you.

One of the controversial subjects surrounding tent-trailers is whether the off-the-ground trailer is better than the trailer with the bed off the ground but with living space on the ground. By renting both types on trial trips you can settle this best for your family. You may find that your first impression was not the right one for you.

Level ground is not the rule in most campgrounds. For this reason, you will want to take a close look at the leveling device used on the trailer you are considering.

Easy access to your storage area might be a consideration for you. If it is necessary to erect the tent to get at important pieces of



Jim Sherman Photo.

The tent trailer is now estimated to comprise about 25% of the camping gear seen on campgrounds. The tent still holds about 50% of the camping families in Iowa.

your camping gear, you might find this a deterrent to buying some particular trailers.

Overall size of the folded package on the road can be another factor which will be best decided if you can actually pull the trailer behind your car on a regular trip.

Convenience of the opened unit is not always considered by the manufacturers and sometimes overlooked by the buyer.

While a dining fly or canopy is attached on many trailers, often it is located so that the camper might use it very little if rains come to the camp area.

While most trailers and their tents can be erected while attached to the car in the campground, some may also be erected while parked at the curb on a city street. If you find that some of the campgrounds on your itinerary are too crowded, or too far away for the amount of driving necessary to get to them, this feature might be desirable.

The kind of material used to build your trailer will determine how much attention and preventative maintenance you will have to provide to keep it on the road.

Wheel sizes will be an important consideration to you if you plan to travel long distances for long periods at a sustained high speed. The larger wheels have less tendency to heat up at high speeds, therefore presenting fewer problems.

Hitches will be a consideration as will electrical hook-ups for license lights, turn signals, and stop lights. Bumper hitches are not satisfactory for many reasons. Safety chains should be used with all hitches and trailers.

Weight is a problem in some trailers. As you may have to handle this unit by hand in certain campgrounds, if it is not at least well balanced for easy handling

you may wish you had stayed with the tent.

Ventilation is important in all tents. Your new tent trailer is no exception. Again, the rental of the unit can help you make up your mind on this point.

Materials used in the trailer, undercarriage and the tent itself should be of the best available at the price you pay. Light colors shed heat and dark ones absorb heat, so try to avoid the very dark shades if possible.

If all of this seems confusing, you may decide to stick with the tent. If, however, your mind is made up, you can make a wise decision by being careful in your selection.

You may even go all the way and decide that the house-type travel trailer is better for you and yours. If so, it's back to the shopping with more things to take into consideration.

MUSHROOMS—

(Continued from page 44)

seen occurring on the undersurface of the mushroom's gills and down the stalk. These poisonous mushrooms grow in clusters around the base of tree stumps (especially oak), and in the soil.

Panus mushrooms are not found on decayed wood as the other two but on dead, dry wood. These are soft and hairy on top growing in clusters with the gills resembling dried apricots. If you should happen across these high lighters, do not pick them with the idea of bringing them home for a midnight mushroom feast as they are leathery and not palatable.

The next time you happen to be out on a moonless night and chance upon an eerie, ghostly glow, chances are your eyes aren't playing tricks on you—it's an innocent, luminous mushroom, its glow a mystery since medieval times.

Iowa Marshes . . .

SWEET MARSH

Carol Buckmann

In the wetlands of the Wapsipinicon River valley, one mile east of Tripoli, is a huge, man-made marsh serving as a breeding ground and sanctuary for waterfowl.

Although managed primarily for waterfowl, Sweet Marsh has many other values; it provides a home for rabbits, game birds, furbearing animals, amphibians and so many birds who share this marsh home.

Hunting, fishing, boating, picnicking, nature study and primitive camping are provided to growing populations seeking relaxation and recreation.

Here Iowa sportsmen see tangible returns from the federal taxes they have been paying for sporting arms, ammunition and state license fees to hunt and fish. The federal Pittman-Robertson Act pays 75 per cent of the land acquisition out of arms and ammunition tax money with the remainder coming from state funds through license fees.

The Act provides that the federal tax money collected will be paid back to the states in direct proportion to the number of hunting licenses issued in the respective states. After the initial acquisition, the state pays the full cost of any additional lands, maintenance and upkeep.

For the Sweet Marsh project the state acquired 1,650 acres of waste land of which 965 acres now covered with water range from a few inches in depth around 12 feet in one local depression where an old lake bed created a sizable depression.

Sweet Marsh is part of the Sweet Marsh Game Management Unit including fourteen other game management areas in northeast Iowa. A Unit Game Manager has headquarters here where he lives and is on duty the year around.

This is not a natural marsh rather a series of impoundments and oxbows where the water held by seven or eight miles of dikes and dams along the east bank of the Wapsipinicon River Plum Creek wetlands. Originally Sweet Marsh was an overflow subject to flooding.

The main purpose in acquiring this wetland was to stabilize water level so that waterfowl potential and management would depend on flooding.

The huge dikes that confine water divide it into three areas each containing slightly over 500 acres. At the north end is an earthen dam across Plum Creek and waters of this stream are ponded in an 80-acre reservoir supplying water for the swamps during dry seasons.

Water is diverted from the reservoir into three impoundments

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Half-Way Mark Shows Two New Fish Records

Denny Rehder

fish activity at the half-way of the year has provided two standing records on the State Conservation Commission's Official fish records listing.

unker 9½-pound largemouth taken by Harley Bryan of Azuma from the city reservoir, and Lake, heads up the new record holders. Bill McBee from Clinton took a 9 pound 6 ounce largemouth from Morris Lake, a Clinton city reservoir for second place in the all-time listing. Bill Lee of Denison notched the fourth place in the all-time list with an 8 pound 12 ounce bass from Arrow Lake in Sac County.

My Meeker of Logan broke
d channel catfish mark with
2 pound 2 ounce catch from the
Sioux River in western Iowa.
er fish have been submitted
to hold the top marks for the
calendar year. Bob Holtz of
Lake, with his 11 pound 4
walleye, heads that listing.
is Kessel of Waukon, tops
rown trout listing for 1964
a 4-pounder. No other fish
yet been entered for other
s. This means that the first
to submit a fish of any size
these other fish species will
natically hold that record for
the.

is interesting to note where these record fish have been taken. The accompanying map indicates the general distribution of records over the state. In Madison County in western Iowa, you will see only three fish on the map, with all of them standing for years. These are the records for channel catfish, and flathead. Dickinson county has the mouth bass, northern and bluegill records, all from Spirit Lake. Allamakee County and the northern Mississippi River hold perch, brown trout, and rainbow trout records.

the inland rivers, you'll find weasel family, seldom, if ever, es Moines River has five fish catches any fish. Most of its diet phy size entered on the lists. is made up of small land animals.



Bill Hart of Denison took this 8¾ pound largemouth from Arrowhead Lake near Lake View. It ranks fourth in the all-time listing.

The Little Sioux River lists three fish for two records; the Cedar River lists three fish for one record; and the Wapsipinicon lists three fish, but no records.

Anglers are urged to send in their large fish for entry on the Big Fish records. To enter his fish the angler must submit the following to the Conservation Commission in Des Moines: name and address of angler, date fish caught, species, where caught and county, total length of fish, weight on scales legal for trade, signatures of two witnesses to the weighing, and a photo of the angler and his fish.

The fisher, a member of the weasel family, seldom, if ever, catches any fish. Most of its diet is made up of small land animals.

FLY FISHING—

(Continued from page 45)

spawning beds. This not only provides good sport and meat for the table; it helps control the bluegill population so that they grow rapidly.

Daytime fishing for bluegills is usually best with wet flies, or very small spinner and fly combinations. Small metal wobblers are also very effective for larger bluegills. Standard pattern wet flies of small size should be fished deep and slowly for bluegills. They tend to school around stumps, brush piles and weed beds. These areas should be explored slowly with the sunken fly. When a fish is caught, try the same spot with repeated casts—a hot spot will often produce several fish. Large bluegills will often make you think you've hooked a good bass, until they start their characteristic corkscrew maneuver. They are fun on a fly rod!

Late in the evening and early in the morning small "poppers" will provide fast and furious action in good bluegill waters. They are persistent and will strike a popper several times until they are hooked! Late in the afternoon, bluegills move toward shore and cruise near the surface looking for food. They will often move twenty feet or more in clear water to take a popper.

In mid-summer, clear water

MARSHES—

(Continued from page 46)

dams and the overflow drains into the Wapsi River.

Over a quarter of a million dollars has been spent constructing these dams and dikes in this intensively developed marsh. Construction was completed in 1950.

By manipulating the water level to keep the water shallow, aquatic vegetation for waterfowl use is able to sustain itself. The varicolored wood duck, said to be the most beautiful North American duck, is the most numerous nesting waterfowl here with many hollow trees providing ideal nesting sites. To a lesser degree, mallards and teal nest at Sweet Marsh.

Under regulations covering Pittman-Robertson appropriations, a portion of the total area of any project must be maintained as a wildlife refuge. One pool is set aside as a permanent waterfowl refuge closed to public hunting at all times. The other pools, though, are open to hunting.

This large area is used heavily for hunting due in part to its nearness to the well-populated areas surrounding and also serves as a playground soaking up much public use.

There is good pheasant hunting

Camels are essentially animals of the arid deserts and have a great aversion to water, only with difficulty being persuaded to cross even the smallest stream.

lakes may provide excellent fishing for bluegills along shores where willows extend to or into the water. Small caterpillar larvae of the willow moth are usually abundant. These small caterpillars are webworms and can often be seen dangling in mid-air, suspended only by a silken thread. When they fall into the water, they coil tightly into a ball. These worms are eagerly sought by bluegills and small white poppers are very effective along willowed shores.

Night fishing with small white or yellow poppers along willow bordered shores will produce the best bluegill fishing possible! You will not catch small bluegills while fishing at night. You should fish the dusk period; then prepare for a treat. A boat is almost a necessity for this type of fishing. On dark nights it is necessary to use a flashlight or electric lantern to adjust the amount of line needed to cast within a foot or two of shore, then cast 10 feet or so from where you shined the light and let the small popping bug float. With a minimum of movement, a bluegill will find the lure. The sucking slurp of a striking bluegill will tell you when to set the hook. Night fishing with poppers will take the largest bluegills in the water you are fishing. Most of them will be real lunkers. Take a big fish bag; you will need it.

on the upland portion, while squirrel and deer hunting is enjoyed along the Wapsi River. Some muskrat trapping is done but this marsh is not managed for high muskrat populations and only a bare minimum are allowed due to the dike damage they cause.

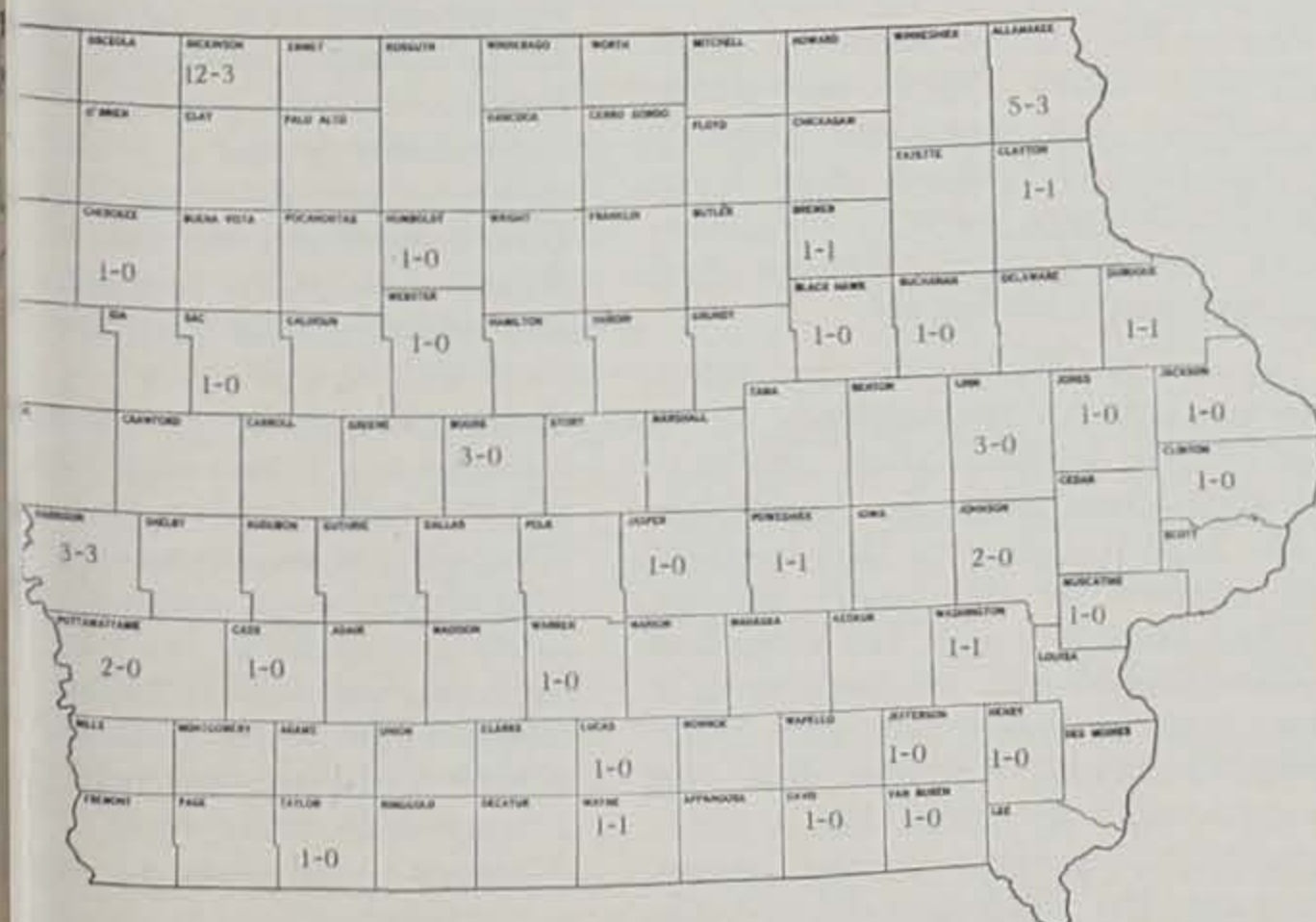
Although hunting is the most important aspect, fishing is the main activity. No motors are allowed due to the wave action causing dike erosion.

Originally, no fish were stocked but overflow from the Wapsi River and Plum Creek resulted landlocking northernns, bass and panfish. The first year the dikes were completed, a rush of water backed over the dikes, landlocking a considerable amount of northernns. Fish are now managed and it is necessary to poison out a portion each year for rough fish control.

Marshes act as nature's sponges, retaining and slowly releasing valuable ground water, and offer an interesting opportunity to see nature first hand.

To watch a brood of wood ducks coming to the water's edge for the first time or just sit, listen and enjoy the sound of the many different voices of the teeming marsh life population is reward enough for the layman, hunter, fisherman or naturalist alike.

Badgers have an excellent "disappearing act." Using all four feet and its mouth, it can dig itself out of sight in a few seconds.



where lowans caught their trophy fish. The first number shows the number listed from each county; the second shows the number of records from that county.

THE MISSISSIPPI - - GREAT FISHING HOLE

Denny Rehder

The Mississippi River along Iowa's eastern border provides nearly 192,000 acres of fine fishing water for Iowans. The river is actually a series of lakes created by eleven locks and dams along the Iowa portion.

The river is extensively fished by over one-half million anglers each year. It has been estimated that the annual yield of game fish is over two and a half million fish.

Each year more and more anglers come to enjoy the fishing offered by the Mississippi and its sloughs and backwater areas. The river is easily accessible along its entire Iowa course with many public and private areas offering access to its waters.

What have studies shown concerning fishing on the "Big River"? Over half of the angling activity on the Mississippi will be found below the lock and dam in the first mile. Here food and oxygen is plentiful for fish life. Two in five anglers on the river will be found fishing between Harpers Ferry and Bellevue. Their overall success averages about one fish per hour of fishing.

Studies also show that fish taken from the river will run 39 per cent panfish, 16 per cent walleye, 13 per cent white bass, 11 per cent sheepshead and 8 per cent catfish.

Fish Are Everywhere

Where does the new angler try his luck in the unfamiliar water of the Mississippi? Bluegill and sunfish are best in backwater and shoreline areas. Bass, panfish and catfish offer their best in sloughs, cuts, lakes and ponds. Walleye and sauger fishing is tops near wing dams, rip-rap and sand bars. Also, immediately below the dams are the "bread and butter" haunts of the walleye fishermen.

Bass are taken almost everywhere in early summer, but as the water warms they will seek shaded



Called by many anglers "the world's greatest fishing hole," the Mississippi River offers fine angling for all species of game fish.

water around stumps, snags, and rock piles. White bass are taken mainly on minnows below the dams, over wing dams, and around sandbars. Sheepshead are found in the channel. Flatheads are found below the locks and in deeper holes. Some bullheading is found in isolated backwaters, pools and lakes. Northerns are plentiful, but not heavily fished.

The heaviest fishing pressure centers around the dams at Guttenberg, Dubuque, Bellevue and Clinton. But, studies indicate that the highest success ratios come from the dam areas north of Burlington and the two dams in the Davenport area.

No matter where you fish on the Mississippi, anglers will be taking fish. Many fishermen refer to the "River" as the "world's greatest fishing hole." Correct or not, they know the sport to be found there.

The whooping crane is larger than the sandhill crane or the great blue heron.

Primitive Fishing Tackle

Fishing is one of man's oldest occupations and the gear used for catching fish has changed but little over the ages. The basic methods in use today—spearing, trapping, netting and angling—had their origin among primitive peoples back in prehistoric times.

Our modern steel fishhooks have gradually evolved from early crude hooks made from flint, bone, ivory, shell, horn or wood. Thousands of years ago, the Swiss Lake Dwellers and the ancient Egyptians used bronze wire bent into a shape like a youngster's pin hook. Much later some inventive fisherman added a barb to those bronze hooks to hold the fish more securely.

The forerunner of the fishhook was probably the gorge, a slender piece of flint, bone or wood with a groove in the middle for attaching a cord. This was buried in the bait and swallowed end first. A pull on the cord turned it crosswise in the stomach and the fish was hauled in.

Early fish lines were of gut, vegetable fibers, sinew, or strips of leather. The American Indians of this region twisted lines from the fibrous inner bark of the basswood tree. Ancient Greeks and Romans used horsehair.

The use of brightly colored trout flies and other artificial baits dates back much farther than present-day sportsmen suppose. Apparently the first mention of this method was written by the Greek author Aelian about 200 A.D. He describes a Macedonian way of angling in a river where "there are fish with speckled skins." These fish fed on a peculiar fly (probably a mayfly) which hovers on the river. However, the fishermen did not use these flies for bait because they lose their natural color and their wings wither. Instead, "they fas-

ten red wool around a hook, a fix on to the wool two feathers which grow under a cock's wattles and which in color are like w. Their rod is six feet long, a their line is the same length."

The American Indians were great fishermen. Studies of the mounds and heaps of garbage pits at their prehistoric village sites along our Illinois River show quantities of fish bones and fish scales. The Indians of the Pacific Northwest and the Eskimos of Alaska depended on fish more than any other people. They used spears, dipnets, traps and hooks to catch salmon in streams and coastal waters where they cured or froze for year-round food.—Cook County Forest Preserve.

Bird Identification Guide for Campers

Upon request we hereby print guide for bird-watchers and nature lovers who find themselves besieged by a wide variety of new and unusual species around state park campgrounds.

Bald-headed tent pitcher
Ruby-throated morning gargle
Red-eyed stake pounder
Tufted sleepy-eye
Common kindling snatcher
Hawk-eyed girl watcher
Burnt-shouldered beach lover
Big-nosed dinner-watcher
Double-breasted bore
Hairy-chested barbecue burner
Greater and lesser water carrier
Stuffed-belly potwatcher
Fleet-footed milkman-catcher
Bumble-fingered garbage dum
Long-armed table-snatcher
Red-shafted match-flicker
Shifty-eyed flower-puller
White-faced air mattress puffer
Trumpeting early riser
Western burrowing beddi
snatcher
Three-toed ax wielder
Gray-crowned lounge
White-thatched table sitter

